REMARKS

As a preliminary matter, it is respectfully submitted that the Examiner made a new ground of rejection which was not necessitated by amendment so that the finality of the outstanding Office Action is premature. Specifically, the new rejection of claims 1-5 and 7-15 under 35 U.S.C. § 112, first paragraph (**enablement**) is based on the feature originally recited in claim 6, which was incorporated into claim 1 in the previously filed amendment. Accordingly, as claim 6 was not rejected under 35 U.S.C. § 112, first paragraph (**enablement**) in the Office Action dated November 12, 2008, the rejection being made now in the outstanding Office Action is a new ground of rejection not necessitated by amendment. Accordingly, the enclosed response to the outstanding Office Action should be treated as a response to a non-final rejection so as to obtain full consideration.

Claims 1-5 and 7-15 stand rejected under 35 U.S.C. § 112, first paragraph (written description) because Applicants' specification allegedly does not support the limitation "$0<z\leq 0.05$." This rejection is respectfully traversed for the following reasons.

The Examiner presumably took the position that a broad, original range limitation does not support a more narrow range limitation; i.e., "$0\leq z\leq 0.05$" allegedly does not support "$0<z\leq 0.05$." However, the range "$0<z\leq 0.05$" is fully contained within the originally filed range of "$0\leq z\leq 0.05$" so as to be fully supported thereby. Indeed, an analogous case has already been decided in *In re Wertheim*, 191 USPQ 90 (CCPA 1976), in which a range "25%-60%" described in the original specification was held to support an amended claim reciting "35%-60%" (*see* MPEP 2163.05(III)).

With respect to the finality of the Office Action and the rejection under 35 U.S.C. § 112, first paragraph (**written description**) noted above, Applicants' representative initiated a telephone interview with Examiner Best to help expedite prosecution. Applicants and Applicants' representative would like to thank Examiner Best for the courtesy in conducting the interview and for the assistance in resolving issues. As a result of the interview, it was agreed that the finality of the outstanding Office Action and the § 112, first paragraph (**written description**) rejection would be withdrawn.

Claims 1-5 and 7-15 stand rejected under 35 U.S.C. § 112, first paragraph (enablement) because the specification allegedly does not clearly describe what process distributes element L in the arrangement set forth in claim 1. This rejection is respectfully traversed for the following reasons.

As would be recognized by one of ordinary skill in the art, the claimed distribution of element L can be realized by the manufacturing process described in Applicants' specification. Specifically, as previously noted, Applicants' specification describes a process in which elements M and L are mixed in ***different*** steps. By using two steps in this manner, it is respectfully submitted that a positive electrode active material in which element M is uniformly distributed and element L is distributed more in a surface portion of the particle than an inside thereof can be obtained.

For example, as known to one of ordinary skill in the art, the coprecipitation method enables a uniform distribution of elements because elements are deposited from a solution. On the other hand, the external addition method uses solid-phase diffusion so that elements can tend to be unevenly distributed on the surface. Accordingly, by using <u>both</u> steps, the claimed

configuration can be realized. Specifically, according to one exemplary embodiment of the present invention, a first step of preparing magnesium (element M) containing cobalt oxide using the coprecipitation method is performed so as to obtain a uniform distribution thereof. Then, a second step of mixing and baking the ***previously obtained*** magnesium/cobalt oxide with aluminum (element L) hydroxide and lithium carbonate ***using the external addition method***, will effect the claimed configuration in which element L is distributed more in a surface portion of the particle than an inside thereof.

In sum, by mixing elements M and L using two ***different*** steps (coprecipitation for uniformity of M and external addition for unevenness of L), a positive electrode active material in which element M is uniformly distributed and element L is distributed more in a surface portion of the particle than an inside thereof can be obtained. The Examiner has not offered any evidence to rebut this presumption as required to assert non-enablement (*see* MPEP § 2164), and indeed, it is respectfully submitted that one of ordinary skill in the art would recognize that the process described in Applicants' specification would effect the claimed configuration.

Based on the foregoing, it is respectfully submitted that claims 1-5 and 7-15 are fully enabled. Accordingly, it is respectfully requested that this rejection be withdrawn.

Claim 1 is independent and stands rejected under 35 U.S.C. § 102 as being anticipated by Tanaka et al. '200 ("Tanaka"). This rejection is respectfully traversed for the following reasons.

The Examiner's basis for maintaining the pending rejection is described on pages 12-13 of the outstanding Office Action. As previously argued, in order to effect the relative arrangement of M and L recited in claim 1, according to one aspect of the present invention, preparation of respective materials are conducted using the ***combination*** of the coprecipitation

method and the external addition method. In contrast, Tanaka expressly discloses using only the external addition method. Experimental evidence showing that the claimed arrangement of M and L are produced by the processes disclosed in the present invention, along with evidence suggesting why Tanaka would not have the claimed arrangement are provided, for example, in paragraphs 108, 109 and Table 2 of Applicants' specification.

However, the Examiner simply discounted these facts by asserting that "there is no evidence that element M in the Tanaka et al. process will not be uniformly distributed" and goes on to merely conclude that Tanaka in fact would have the same arrangement of M and L based on vague processing disclosure thereof. It is respectfully submitted that the Examiner has improperly shifted the burden of proof in this case. That is, in response to Applicants' experimental evidence supporting how the claimed arrangement is made and why Tanaka does not disclose the claimed arrangement, the Examiner counters only with generalities and alleged similarities between the disclosed processes of the present invention and processes disclosed by Tanaka to effectively assert that Tanaka *may* have a similar structure. However, it is respectfully submitted that Tanaka does not use the same approach to making the compound, so that the Examiner's conclusions are based on a false premise. Moreover, as acknowledged by the Examiner, "inherency may not be established by probabilities or possibilities," *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999). For the reasons that follow, it is respectfully submitted that the disclosed manufacturing process of Tanaka in fact would not result in the claimed structural arrangement, much less inherently do so.

Specifically, as argued in the previous response, Tanaka expressly discloses preparing a positive electrode active material by mixing all the raw materials and then baking the mixture in a dry airflow. That is, element M and L are mixed in the ***same*** step. According to the

manufacturing process of Tanaka, therefore, the resulting structure would at best either be composed so that (1) both elements M and L are uniformly dispersed or (2) both elements M and L are unevenly distributed in the particle.

Tanaka does not disclose or suggest making a *given* composition using the coprecipitation method for one element in the composition and the *different* external addition method for another element in the composition. In this regard, in fact, it would be impossible to selectively make only element M uniformly dispersed and selectively make only element L distributed more on a surface portion. Indeed, as noted above, according to the **singular** process used by Tanaka to effect a given composition of alleged elements M and L, Tanaka does not enable, much less disclose or suggest, a manufacturing process by which a "hybrid" composition can be made where elements M and L are together in a composition but arranged differently.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that "inherency may not be established by probabilities or possibilities", *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that Tanaka does not anticipate claim 1, nor any claim dependent thereon.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as claim 1 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable.

In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejections under 35 U.S.C. § 102/103 be withdrawn.

CONCLUSIONS

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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